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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Arlindo L. Castelhano, et al.
U.S. Serial No.: 09/728,616
Filed : December 1, 2000
For : COMPOUNDS SPECIFIC TO ADENOSINE A₃ RECEPTOR
AND USES THEREOF

1185 Avenue of the Americas
New York, New York 10036
February 8, 2002

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

VOLUME 1 OF 6

INFORMATION DISCLOSURE STATEMENT

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants would like to direct the Examiner's attention to the following documents which are listed on Form PTO-1449 (**Exhibit A**) and are also listed below. Copies of the documents listed below as items 1-112 are attached hereto as **Exhibits 1-112**, enclosed in six (6) volumes respectively.

For the convenience of the Examiner, applicants point out that references 60-63, 65-73, 75-78, 108 and 110 were cited in a corresponding PCT International Search Report for International Application No. PCT/US99/12135; reference 83 was cited in a corresponding PCT International Search Report for International Application No. PCT/US00/32702; references 79-80 were cited by the U.S. Patent Office in connection with U.S. Application No. 09/454,075; and references 109 and 111 were cited in the corresponding PCT Preliminary Examination Report for International Application No. PCT/US99/12135. A copy of the aforementioned reports can be found in Exhibits 105, 106, and 112 respectively.

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1. U.S. Patent No. 5,296,484, issued March 22, 1994, Coghlan, M. J. et al. (**Exhibit 1**);
2. U.S. Patent No. 5,409,930, issued April 25, 1995, Spada, A. P. et al. (**Exhibit 2**);
3. U.S. Patent No. 5,516,894, issued May 14, 1996, Reppert, S. M. (**Exhibit 3**);
4. U.S. Patent No. 5,580,870, issued December 3, 1996, Barker, A. J. et al. (**Exhibit 4**);
5. U.S. Patent No. 5,646,130, issued July 8, 1997, Shi, G. H. (**Exhibit 5**);
6. U.S. Patent No. 5,681,941, issued October 28, 1997, Cook, P. D. et al. (**Exhibit 6**);
7. U.S. Patent No. 5,710,158, issued January 20, 1998, Myers, M. R. et al. (**Exhibit 7**);
8. U.S. Patent No. 5,714,493, issued February 3, 1998, Myers, M. R. et al. (**Exhibit 8**);
9. U.S. Patent No. 5,721,237, issued February 24, 1998, Myers, M. R. et al. (**Exhibit 9**);
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13. PCT International Application No. WO 94/17090, published August 4, 1994 (**Exhibit 13**);
14. PCT International Application No. WO 95/11681, published May 4, 1995 (**Exhibit 14**);
15. PCT International Application No. WO 95/20597, published August 3, 1995 (**Exhibit 15**);
16. PCT International Application No. WO 96/19478, published June 27, 1996 (**Exhibit 16**);
17. PCT International Application No. WO 97/05138, published February 13, 1997 (**Exhibit 17**);
18. PCT International Application No. WO 97/33879, published September 18, 1997 (**Exhibit 18**);
19. PCT International Application No. WO 98/08382, published March 5, 1998 (**Exhibit 19**);
20. PCT International Application No. WO 98/22465, published May 28, 1998 (**Exhibit 20**);
21. PCT International Application No. WO 99/06053, published February 11, 1999 (**Exhibit 21**);

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23. PCT International Application No. WO 99/33815, published July 8, 1999 (**Exhibit 23**);
24. PCT International Application No. WO 99/42093, published August 26, 1999 (**Exhibit 24**);
25. European Patent Application No. EP 322 242 A2, published June 28, 1989 (**Exhibit 25**);
26. European Patent Application No. EP 729 758 A2, published April 9, 1996 (**Exhibit 26**);
27. Japanese Patent Application No. JP 09-291089, (English abstract only) published May 11, 1999 (**Exhibit 27**);
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33. Cheng, Y. and Prusoff, W. H. (1973) "Relationship Between The Inhibition Constant (K_i) And The Concentration Of Inhibitor Which Causes 50 Per Cent Inhibition (I_{50}) Of An Enzymatic Reaction", Biochem. Pharmacol., 22: 3099-3109 (**Exhibit 33**) ;
34. Christianson, T. W. et al., (1992) "Multifunctional yeast high-copy-number shuttle vectors", Gene, 110: 119-122 (**Exhibit 34**) ;
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51. U.S. Patent No. 5,834,609, issued November 10, 1998, Horne, D. A. et al. **(Exhibit 51);**
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72. Iwanura, H. et al. (1996) "Quantitative Aspects of the Receptor Binding of Cytokinin Agonists and Antagonists" J. Med. Chem., 26: 838-844 (**Exhibit 72**);

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75. Muller, E. C. et al. (1996) "Chiral Pyrrolo[2,3-d]pyrimidine and Pyrimido[4,5,-b]indole Derivatives: Structure-Activity Relationships of Potent, Highly Steroselective A₁-Adenosine Receptor Antagonist" J. Med. Chem., 39: 2482-2491 (**Exhibit 75**);

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79. DeNinno, M.P. in Annual Reports in Medicinal Chemistry, Vol. 33, (Academic Press: San Diego, 1998), pp. 111-120 (**Exhibit 79**);
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81. U.S. Patent No. 5,646,156, issued July 8, 1997, Jacobson, et al. (**Exhibit 81**);
82. U.S. Patent No. 5,780,481, issued July 14, 1998, Jacobson, et al. (**Exhibit 82**);
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103. Yao Y., et al., (1997) "Adenosine A3 Receptor Agonists Protect HL-60 and U-937 Cells from Apoptosis Induced by A3 Antagonists", Biochemical And Biophysical Research Communications, 232: 317-322 (**Exhibit 103**);
104. Zhao Z., et al., (2000) "A role for the A3 Adenosine receptor in determining tissue levels of cAMP and blood pressure: studies in knock-out mice", Biochimica et Biophysica Acta, 1500: 280-290 (**Exhibit 104**);
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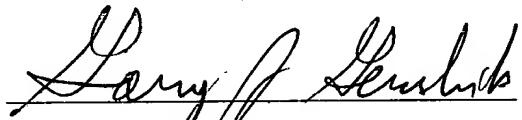
Applicants request that the Examiner review the references and make them of record in the subject application.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

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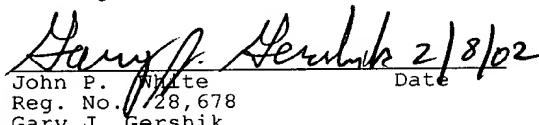
No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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Client OSI (1919) File No. 60390-G AJPW/GJG/JBC
Date February 8, 2002

Kindly acknowledge receipt of the accompanying

Information Disclosure Statement in connection with Arlindo L. Castelhano, et al., COMPOUNDS SPECIFIC TO ADENOSINE A₃ RECEPTOR AND USES THEREOF U.S. Serial No. 09/728,616, filed December 1, 2000, including **Exhibit A** (Form PTO-1449), **Exhibits 1-112** and certificate of mailing dated February 8, 2002.

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